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1 2.38 The method of claim 1, wherein selecting one of the plurality of paths
2 comprises performing an implicit negotiation in which the path is defined by a source
3 address of a message communicated by the base station and by a source address of a
4 message communicated by the system controller.

1 (3.) The method of claim 2, wherein performing the implicit negotiation
2 comprises sending and receiving messages in a session having bi-directional data flow.

1 4.39 The method of claim 1, wherein the network is a packet-switched, ୧୫ ୩୦
2 connectionless network, and wherein selecting one of the plurality of paths comprises
3 selecting one of a plurality of virtual connections on the packet-switched, connectionless
4 network, each virtual connection based on a base station address and a system controller
5 address.

1 5.40 The method of claim 1, further comprising selecting another path by
2 sending a message from another source address.

1 6. The method of claim 5, wherein sending the message comprises sending a
2 UNITDATA message.

1 7. The method of claim 1, further comprising selecting another path by
2 sending a change-route request.

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1 ~~15.~~ A first system for use in a mobile communications network, comprising:
 2 a communications module adapted to communicate over a packet-
 3 switched network coupled to a second system, the first system being one of a base station
 4 and a system controller and the second system being another one of the base station and
 5 the system controller;

6 a storage element⁸¹² containing one or more first addresses associated with
 7 the first system; and

8 a control module⁸¹⁰ adapted to select one of plural paths over the packet-
 9 switched network, each path defined by one address associated with the first system and
 10 one address associated with (the node.)

1 ~~16.~~ The first system of claim 15, wherein the communications module is
 2 adapted to communicate over a Gb interface provided in the packet-switched network.

1 ~~17.~~ The first system of claim 15, comprising the base station.

1 ~~18.~~ The first system of claim 15, comprising the system controller, the system
 2 controller comprising a serving GPRS support node. ^{5G5N}

1 ~~19.~~ The first system of claim 15, wherein each path comprises a virtual
 2 connection.

1 ~~20.~~ The first system of claim 15, wherein each address comprises an Internet
 2 Protocol address.

1 ~~21.~~ The first system of claim 15, wherein each path is further defined by a
 2 User Datagram Protocol port of the first system and a User Datagram Protocol port of the
 3 second system.

1 ~~22.~~ The first system of claim 15, wherein the control module comprises a load
 2 sharing task to select different paths for different mobile stations.

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1 30. A method for load sharing between communication ports on an originating
2 device and a destination device where the communication link is an Internet Protocol-
3 based communication link, comprising:

4 receiving a first message from an originating device on a communication
5 port of a destination device, the communication port identified by an original Internet
6 Protocol address;

7 determining which communication port on the destination device to use
8 for subsequent messages in response to receiving the first message, the communication
9 port to be used for subsequent messages identified by a new Internet Protocol address;

10 transmitting a change-route message from the destination device to the
11 originating device, the change-route message specifying the new Internet Protocol
12 address for messages transmitted from the originating device to the destination device.

1 31. The method of claim 30, further comprising:

2 receiving the change-route message at the originating device; and
3 changing a destination Internet Protocol address to the new Internet
4 Protocol address for subsequent messages transmitted from the originating device to the
5 destination device.

1 32. The method of claim 30, wherein the originating device is a base station
2 and the destination device is a serving GPRS (Global Packet Radio Service) support
3 node.

1 33. The method of claim 30, wherein the originating device is a serving GPRS
2 (Global Packet Radio Service) support node and the destination device is a base station.

1 34. The method of claim 30, further comprising transmitting subsequent
2 messages from the originating device to the new Internet Protocol address on the
3 destination device.

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1 35. The method of claim 30, wherein load sharing is performed on a per
2 mobile station basis.

1 (36.) A data signal embodied in a carrier wave comprising instructions for
2 performing implicit load sharing in a network between nodes in a wireless
3 communications network, the instructions when executed causing a first node to:
4 receive a signal from a mobile station;
5 select a first address of one or more first node addresses to use for
6 servicing the mobile station;
7 transmit a message containing the signal from the first node to a primary
8 address of a second node;
9 receive another message from the second node, the other message sent
10 from a second address associated with the second node; and
11 select a path based on the first and second addresses.

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1 (37.) An article comprising at least one storage medium containing instructions
2 for establishing communications between a base station and a system controller, the
3 instructions when executed causing a first node to:
4 identify a plurality of paths in the network, each path defined by an
5 address in the base station and an address in the system controller, the first node being
6 one of the base station and system controller; and
7 select one of the plurality of paths to communicate data associated with a
8 given mobile station.

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1 38. The article of claim 37, wherein the instructions when executed cause the
2 first node to:
3 select one of the plurality of paths by performing an implicit negotiation in
4 which the path is defined by a source address of a message communicated by the base
5 station and by a source address of a message communicated by the system controller.

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1 44. The article of claim 37, wherein the instructions when executed cause the
2 first node to further:
3 disable an address; and
4 send a change-route request containing the disabled address to change a
5 path for each mobile station assigned a path defined by the disabled address.